Inspection Date:	August 14, 2012
Start:	8:02 am
Weather:	light rain previous day; sunny
Site:	Trans Energy, Inc. – Groves Well Pad Site
	Williams Energy – Fort Beeler Cryogenic Plant Site
Location:	Marshall, WV

The Fort Beeler Cryogenic Plant (Plant) is operated by Williams Energy (Williams). The Cryogenic Plant shares an entrance with the Trans Energy Groves Well Pad. A road branching from the facilities' entrance provides access to the Groves Pad, which is located northwest of the Plant. The Sites are located 0.5 mile south of the intersection of Middle Grave Creek (County Highway 34) and Waynesburg Pike (US 250) in Cameron, Marshall County, West Virginia (26033). The Sites are located on unnamed tributaries (UNTs) of Middle Grave Creek. These tributaries flow 300 lf to Middle Grave Creek, 12.5 miles to Grave Creek, and then 1.1 miles to the Ohio River. According to the Pittsburgh District of the U.S. Army Corps of Engineers ("USACE"), Grave Creek is considered navigable 1.1 miles above its mouth to the Ohio River. The distance from the Site to this TNW point is thus approximately 12.5 river miles.

On August 14, 2012, representatives from the U.S. Environmental Protection Agency ("EPA"), the USACE, and U.S. Fish and Wildlife Service ("USFWS") conducted a Clean Water Act Section 404 inspection at the Sites along with representatives of the West Virginia Department of Environmental Protection ("WVDEP") Environmental Enforcement and Oil & Gas Offices. Company representatives and Trans Energy counsel were also present. See sign-in sheet for complete list of attendees.

It is EPA's belief that Williams Energy currently owns the property that the two sites are located on; however Caiman Energy (Caiman) was the original owner of the plant and was responsible for its construction. On April 30, 2012, Caiman's West Virginia assets were sold to Williams Partners. No wetland or stream delineation was conducted at the Sites prior to construction.

According to Soil Survey Geographic Database (SSURGO) mapping, the Site is underlain by Culleoka-Dormont complex (15 to 25 percent slopes)(CmD), Dormont-Culleoka complex (25 to 35 percent slopes (DrE), Dormont-Culleoka complex, 35 to 70 percent slopes, very stony (DsF), and Dormont silt loam (DoD). These soils are various complexes of Dormont and Culleoka soils. Culleoka soils are found on hillslopes on hills with parent material consisting of nonacid residuum weathered from shale, siltstone and fine-grained sandstone. Dormont soils are found on hillslopes on hills, ridges on hills, and structural benches on hills with parent material consisting of nonacid residuum weathered from shale and siltstone. The two soils are neither flooded nor ponded, and do not meet hydric criteria.

WC1 is an UNT to Middle Grave Creek. The stream, which is not mapped by the USGS, flows southwest from the well pad. At the time of the inspection, water was flowing from a concrete end wall located south of the Groves Well Pad and from a PVC pipe draining the Fort Beeler site. The stream had been impacted by grading for the construction of the pad and access roads. Stumps, wood chips, dirt, rock, and sediment were present in the channel. Approximately 150 to 200 lf of channel had been impacted in this way. Although disturbed,

WC1 had a well-developed bed and bank and channel characteristics immediately downstream of the disturbance. Further downstream, rock fill had been placed in the stream channel for approximately 55 lf. Debris dams and excessive sedimentation were present in the channel.

WC1a is an UNT to WC1. The stream, which is not mapped by the USGS, flows west from a seep in the hillside to WC1. The stream had been impacted by grading for the construction of the sites and rerouted north of the original confluence with WC1. Hay bales were observed in the channel. Impacts to WC1a were estimated to be up to 500 lf. Erosion ditches on the hillslope draining towards WC1a had up to 6-8" water.

WC1 was assessed downstream of the confluence of WC1 and WC1a. This site was selected because it approached more natural conditions. The stream was scored as perennial using the NC and OH methods. Watershed area upstream of the sampled reach is approximately 11 acres, which would be expected to support at least intermittent flow and may support perennial flow in this ecoregion in a normal water year. Macrobenthos diversity was moderate and abundance was low due to the drought and excessive sedimentation.

WC2a is an UNT to Middle Grave Creek. The stream, which is not mapped by the USGS, flows south from the hillslope of the cryogenic plant to WC2. *Impatiens capensis* (FACW) was observed growing in the stream channel. During the time of the inspection, flow was present in the channel. The channel had defined bed and bank, and substrate dominated by silt. Boulders were also present in the channel. Approximately 100 lf of channel may have been impacted by clearing and grading for construction of the cryogenic plant.

WC2 is an UNT to Middle Grave Creek. The stream, which is not mapped by the USGS, flows south from the hillslope of the cryogenic plant. At the time of the inspection, water was present in the channel. Approximately 100 lf of channel may have been impacted by clearing and grading for construction of the cryogenic plant.

WC3 is an UNT to an UNT to Middle Grave Creek. The stream, which is not mapped by the USGS, flows north from the hillslope of the road between the Groves Pad and cryogenic plant. Approximately 60+ lf had been impacted by fill. The stream had been piped into black plastic corrugated pipes beneath the access road. Directly downstream of the pipes, boulders had been placed in the stream channel. Cobble lined the stream's bed and bank further downstream. A rock check dam had also been constructed in the stream channel.

Impact estimates (based on site measurements and GIS)

Stream	Estimated feet of impact
WC1	~250
WC1a	~500
WC2	100
WC2a	100
WC3	60+
Total	~1,010